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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,702	09/25/2003	Manabu Ohga	CFA00008US	9235

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CANON U.S.A. INC. INTELLECTUAL PROPERTY DIVISION
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EXAMINER	
RODRIGUEZ, LENNIN R	

ART UNIT	PAPER NUMBER
2625	

NOTIFICATION DATE	DELIVERY MODE
12/30/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sivon.kalminov@cda.canon.com
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Office Action Summary	Application No.	Applicant(s)	
	10/672,702	OHGA, MANABU	
	Examiner	Art Unit	
	LENNIN R. RODRIGUEZ	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,6,8 and 14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,6,8 and 14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application.
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/03/2009 has been entered.

Response to Arguments

2. Applicant's arguments filed 11/03/2009 have been fully considered but they are not persuasive. Applicant's argument regarding "Decker does not teach 'determining, by the processor, when a black-printing compensation is applied and the input color data indicates a simple black color, output color data for the simple black color having a lightness level equivalent to a lightness level of the input color data, based on the source profile and the determined relationship between lightness levels and black color'; and 'determining, by the processor, when the black-printing compensation is not applied or when the black-printing compensation is applied and the input color data does not indicate the simple black color, output color data by using the source profile and the second color conversion of the destination profile without using the determined relationship between lightness levels and black color'. Krabbenh6ft fails to supplement

the deficiencies of Decker" has been fully considered; in response Decker '984 discloses a third section (112 in Fig. 1b) arranged to determine, when a black-printing compensation is applied and the input color data indicates black color (column 9, lines 32-34, for example when C=M=Y=0 the input indicates simple black), output color data for the simple black color having a lightness level equivalent to a lightness level of the input color data based on the source profile and the determined relationship between lightness levels and black color (column 9, line 60 through column 10, line 2, where the output color based on the printer profile is determined by use of the graphic on Fig. 5, which takes the relationship between lightness level and black color into account). Decker '984 discloses all the subject matter as described above except determining, when the black-printing compensation is not applied or when the black-printing compensation is applied and the input color data does not indicate the simple black color, output color data by using the source profile and the destination profile without using the determined relationship between lightness levels and black color. However, Rozzi '580 teaches determining, when the black-printing compensation is not applied or when the black-printing compensation is applied and the input color data does not indicate the simple black color (column 7, lines 38-45, the input color does not represents simple black), output color data by using the source profile and the destination profile without using the determined relationship between lightness levels and black color (column 7, lines 35-45, forward transformation). Having a system of Decker '984 reference and then given the well-established teaching of Rozzi '580 reference, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to modify the apparatus, method and computer readable medium of Decker '984 to include determining, when the black-printing compensation is not applied or when the black-printing compensation is applied and the input color data does not indicate the simple black color, output color data by using the source profile and the destination profile without using the determined relationship between lightness levels and black color as taught by Rozzi '580 because the system would perform the printing process from a first set of color values to a second set of color values in an efficient manner, increasing functionality of the system overall, thus making an almost exact match of the source colors at the destination device.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 3, 6, 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Decker et al. (US 6,281,984) in view of Rozzi (US 6,956,580).

(1) regarding claim 1, 6 and 8:

Decker '984 discloses an information processing apparatus (system in Fig. 4) for converting input color data including a plurality of color component data and black component data into output color data including a plurality of color component data and black component data (column 1, lines 44-49, CMY (plurality of colors), K (black)), the input color data being dependent on a source device and the output color data being

dependent on a destination device (column 1, lines 44-49, where CMYK comes from a source profile and the conversion is done based on the printer (destination) profile), the information processing apparatus comprising:

a first section (108 in Fig. 1a) arranged to obtain a source profile corresponding to the source device and a destination profile corresponding to the destination device (column 8, lines 60-62 and column 9, lines 22-25, where the source profile (externally defines CMYK) and the destination profile (given printer) are acknowledged);

a third section (112 in Fig. 1b) arranged to determine, when a black-printing compensation is applied and the input color data indicates black color (column 9, lines 32-34, for example when C=M=Y=0 the input indicates simple black), output color data for the simple black color having a lightness level equivalent to a lightness level of the input color data based on the source profile and the determined relationship between lightness levels and black color (column 9, line 60 through column 10, line 2, where the output color based on the printer profile is determined by use of the graphic on Fig. 5, which takes the relationship between lightness level and black color into account),

wherein a value of plurality of color component data included in the input color data determined as the simple black color is 0 (column 9, lines 32-34, for example when C=M=Y=0 the input indicates simple black).

Decker '984 discloses all the subject matter as described above except wherein the destination profile includes a first color conversion from a device dependent color space into a device-independent color space and a second color conversion from a device-independent color space into a device dependent color space:

a second section arranged to determine a relationship between lightness levels and black color based on the first color conversion of the destination profile;

determining, when the black-printing compensation is not applied or when the black-printing compensation is applied and the input color data does not indicate the simple black color, output color data by using the source profile and the destination profile without using the determined relationship between lightness levels and black color.

However, Rozzi '580 teaches wherein the destination profile includes a first color conversion from a device dependent color space into a device-independent color space (column 7, lines 35-45, forward transformation) and a second color conversion from a device-independent color space into a device dependent color space (column 7, lines 35-45, reverse transformation):

a second section arranged to determine a relationship between lightness levels and black color based on the first color conversion of the destination profile (column 7, lines 46-59, where L is the lightness);

determining, when the black-printing compensation is not applied or when the black-printing compensation is applied and the input color data does not indicate the simple black color (column 7, lines 38-45, the input color does not represents simple black), output color data by using the source profile and the destination profile without using the determined relationship between lightness levels and black color (column 7, lines 35-45, forward transformation).

Having a system of Decker '984 reference and then given the well-established teaching of Rozzi '580 reference, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus, method and computer readable medium of Decker '984 to include wherein the destination profile includes a first color conversion from a device dependent color space into a device-independent color space and a second color conversion from a device-independent color space into a device dependent color space: a second section arranged to determine a relationship between lightness levels and black color based on the first color conversion of the destination profile; determining, when the black-printing compensation is not applied or when the black-printing compensation is applied and the input color data does not indicate the simple black color, output color data by using the source profile and the destination profile without using the determined relationship between lightness levels and black color as taught by Rozzi '580 because the system would perform the printing process from a first set of color values to a second set of color values in an efficient manner, increasing functionality of the system overall, thus making an almost exact match of the source colors at the destination device.

(2) regarding claim 3:

Decker '984 further discloses wherein the input data and the output data are either simple black colors (column 9, lines 32-34, for example when C=M=Y=0 the input indicates simple black) or achromatic.

(3) regarding claim 14:

Decker '984 further discloses wherein the determination of the relationship between lightness levels and black color includes:

generating, by converting the plurality of the simple black color by using the destination profile, a first conversion condition for converting the black color into the lightness level (column 10, lines 3-16); and

performing an inverse conversion process on the first conversion condition (column 10, line 66 through column 11, line 4, where the values are processed by the inversion/interpolation program 108).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LENNIN R. RODRIGUEZ whose telephone number is (571)270-1678. The examiner can normally be reached on Monday - Thursday 7:30am - 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman can be reached on (571) 272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lennin R Rodriguez/
Examiner, Art Unit 2625

/Mark K Zimmerman/

Supervisory Patent Examiner, Art Unit 2625